

the recitations of the base claim. Reconsideration of the pending claims is respectfully requested.

The Examiner has rejected claims 1-3 and 5-10 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,228,110 to Munsinger (the "Munsinger patent") in view of U.S. Patent No. 5,545,209 to Roberts et al. (the "Roberts patent"). Applicant has amended claims 1 and 7 to clarify the claimed invention. Claim 1 recites a structure which includes a catheter having an elongated shaft, an expandable member in fluid communication with an inflation lumen extending along the catheter shaft, and a stent mounted on the expandable member. Claim 1 further includes a sheath adapted to cover a portion of the stent during delivery which is moveable over a portion of the expandable member so that the portion of the expandable member not covered by the sheath expands to the desired inflated diameter upon inflation to create a working length at least as long as the length of the mounted stent. Method claim 7 now includes the recitation that the sheath is placed along the expandable member to create a working length which is at least as long as the mounted stent. These particular recitations of claims 1 and 7 are not shown or even remotely suggested in the Roberts patent since the Roberts patent only discloses a sheath/constraint capable of constraining a balloon so that it may be progressively and incrementally inflated to progressively deploy a stent. The Roberts patent fails to disclose a structure in which the sheath/constraint is placed over a portion of the expandable member (the balloon) to prevent a portion of the sheath from expanding

while creating a working length of the expandable member which is at least as long as the length of the stent. Applicant's invention, as defined by claims 1 and 7, allows for the use of longer expandable members (balloons) when deploying smaller length stents by preventing a portion of the expandable member from expanding while creating a working length that allows the stent to be fully deployed within the body vessel. The Roberts patent does not teach such a structure and arguably teaches away from Applicant's claimed structure since the stent in the Roberts patent is progressively deployed by only a portion of the balloon length at a time.

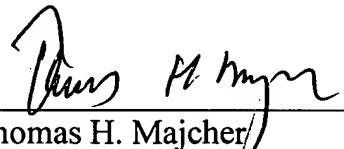
Figures 3-6 of the Roberts patent show the progressive inflation sequence when the constraint 14 disclosed in the Roberts patent is utilized. As can be seen in FIG. 6, the constraint 14 is positioned over the catheter body so that it no longer contacts the balloon 10 (see Col. 9, lines 32-34). This last sequence shows the balloon fully inflated with the constraint 14 retracted away from the balloon. Therefore, the Roberts patent fails to disclose the use of the constraint (sheath) to cover the part of the expandable member which may not be needed to deploy the stent while still creating a working length that is at least as long as the mounted stent. The Munsinger patent fails to disclose or even remotely suggest this particular structure as well. Accordingly, it is believed that the combination of the Munsinger patent with the Roberts patent fails to achieve the structure of the claimed invention. Accordingly, Applicant respectfully requests the Examiner to withdraw the Section 103(a) rejection.

Attached hereto is a marked-up version of the changes made to the claims by the current Amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

In view of the foregoing, it is respectively urged that all of the present claims of the application are patentable and in a condition for allowance. The undersigned attorney can be reached at 310-824-5555 to facilitate prosecution of this application, if necessary.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A stent delivery catheter assembly, comprising:

[a)] a catheter including an elongated catheter shaft having a proximal end and a distal end with an inner inflation lumen extending therein;

an expandable member having a proximal end and a distal end, a length and a desired inflated diameter disposed near the distal end of the elongated catheter shaft which is in fluid communication with the inner inflation lumen, the expandable member being adapted to receive a stent for mounting thereon; [and b)]

a stent mounted on the expandable member; and

a moveable sheath adapted to cover a portion of the stent during delivery and having an inner lumen with smaller diameter than the desired inflated diameter of the expandable member, the sheath being^Δ movable over a portion of the expandable member so that only a portion of the expandable member not covered by the sheath expands to [a] the desired inflated diameter^Δ upon inflation to create a working length of the expandable member which is at least as long as the length of the [; and c) a] stent mounted on the expandable member.

4. (Amended) [The stent delivery catheter assembly of claim 1] A stent delivery catheter assembly, comprising:

a catheter including an elongated catheter shaft having a proximal end and a distal end with an inner inflation lumen extending therein;


an expandable member having a proximal end and a distal end, a length and a desired inflated diameter disposed near the distal end of the elongated catheter shaft which is in fluid communication with the inner inflation lumen, the expandable member being adapted to receive a stent for mounting thereon;

a moveable sheath adapted to cover a portion of the stent during delivery and having an inner lumen with smaller diameter than the desired inflated diameter of the expandable member, the sheath being movable over a portion of the expandable member so that only a portion of the expandable member not covered by the sheath expands to a desired inflated diameter upon inflation; and

a stent mounted on the expandable member, wherein:

the moveable sheath has a distal tip which is substantially expandable and expands as the expandable member is expanded.

7. (Twice Amended) A method of delivering a stent within an area of treatment in a body lumen, comprising:

 mounting a stent upon an expandable member having a length greater than the length of the stent;

covering the stent and expandable member with a moveable sheath which is disposed in a co-axial arrangement over the stent and expandable member;

advancing the stent and expandable member into the area of treatment in the body vessel;

retracting the sheath to expose the mounted stent on the expandable member, the moveable sheath being placed along the expandable member to create a working length of the expandable member in which only the portion of the expandable member not covered by the sheath will expand when inflated;

inflating the expandable member to create the working length which is at least as long as the stent to expand the stent within the body vessel; and

deflating the expandable member.

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